

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte GERALD J. JULIEN

Appeal No. 2001-1553
Application No. 09/224,757

ON BRIEF

Before McQUADE, NASE and BAHR, Administrative Patent Judges.
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 10, 21, 25, 26 and 31. Claim 16 stands allowed and claims 9, 12, 15, 17-20 and 22-24 stand withdrawn from consideration as being directed to non-elected species. No other claims are pending in the application. As indicated on page 3 of the examiner's answer (Paper No. 15), the amendment after final (Paper No. 13) filed with appellant's brief (Paper No. 12) has not been entered.

BACKGROUND

The appellant's invention relates to gun barrels which are light weight, ultra-high strength, corrosion resistant and virtually burst-proof and have low heat conductivity and low coefficient of friction (specification, page 1). A copy of claims 10 and 21 under appeal is set forth in the appendix to the appellant's brief and a copy of claims 25, 26 and 31 is set forth in the appendix to the examiner's answer.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

Double Patenting

The examiner has rejected claim 10 under the judicially created doctrine of double patenting for the reasons stated on pages 5-6 and 7-8 of the answer. Appellant's only argument thereagainst is that the examiner issued a requirement for election of species in parent Application No. 08/753,182 (now U.S. Pat. No. 5,856,631, issued January 5, 1999) which included a species to which claim 10 on appeal is directed and that, thus, use of appellant's earlier patent as a reference against this claim is contrary to 35 U.S.C. § 121 (brief, pages 4-5). For the reasons which follow,

appellant can find no protection against the use of U.S. Pat. No. 5,856,631 in a double patenting rejection of claim 10 in the instant application.

35 U.S.C. § 121 provides as follows:

If two or more independent and distinct inventions are claimed in one application, the Director may require the application to be restricted to one of the inventions. If the other invention is made the subject of a divisional application which complies with the requirements of section 120 of this title it shall be entitled to the benefit of the filing date of the original application. A patent issuing on an application with respect to which a requirement for restriction under this section has been made, or on an application ***filed as a result of such a requirement***, shall not be used as a reference either in the Patent and Trademark Office or in the courts against a divisional application or against the original application or any patent issued on either of them, if the divisional application is filed before the issuance of the patent on the other application. If a divisional application is directed solely to subject matter described and claimed in the original application as filed, the Director may dispense with signing and execution by the inventor. The validity of a patent shall not be questioned for failure of the Director to require the application to be restricted to one invention [emphasis ours].

The practice of election of species is addressed in 37 CFR § 1.146, which provides as follows:

In the first action on an application containing a generic claim to a generic invention (genus) and claims to more than one patentably distinct species embraced thereby, the examiner may require the applicant in the reply to that action to elect a species of his or her invention to which his or her claim [*sic*: claims] will be restricted if no claim to the genus is found to be allowable. However, if such application contains claims directed to more than a reasonable number of species, the examiner may require restriction of the claims to

not more than a reasonable number of species before taking further action in the application.

Pursuant to 37 CFR § 1.146, in an action mailed October 15, 1997 (Paper No. 2 in parent Application No. 08/753,182), the examiner pointed out that the parent application contained claims directed to several patentably distinct species of the claimed invention and stated the following:

Applicant is required under 35 U.S.C. § 121 **to elect a single disclosed species** for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a response to this **requirement must include an identification of the species that is elected** consonant with this requirement, and **a listing of all claims readable thereon, including any claims subsequently added**. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions patentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

In response to the above-mentioned Office action, appellant elected one of the enumerated species, identified the claims which read on the elected species, and

stated that “[w]ith the allowance of generic claims in this application, Applicant looks forward to examination of all the claims presented in this Application” (Paper No. 3 in parent application). Subsequent to the first Office action on the merits (Paper No. 4 in the parent application), however, appellant voluntarily canceled all of the claims directed to non-elected species, namely, claims 9, 10, 12 and 15-20 (see pages 2 and 7 of Paper No. 5 of the parent application).

Ultimately, at least one generic claim (now patent claim 1) was allowed in the parent application. If appellant had retained dependent claim 10 directed to the smooth axial bore feature in the parent application, upon the allowance of a generic claim in Paper No. 7 in the parent application, appellant would have been entitled to consideration of such a claim (or an independent claim directed to the smooth bore feature and including all of the limitations of the allowed generic claim) in the parent application pursuant to 37 CFR § 1.146, as explained by the examiner in Paper No. 2 in the parent application. That appellant was aware of this fact is evident from the above-quoted language in appellant’s response (Paper No. 3 in the parent application) to the election requirement. Instead of presenting a dependent claim, or a claim otherwise including all of the limitations of an allowed generic claim, directed to the smooth bore feature in the parent application, appellant opted to file the instant application on January 4, 1999, just one day before the issuance of U.S. Pat. No. 5,856,631 resulting from the parent application, presenting, *inter alia*, claim 10 directed to the smooth bore feature.

In light of (1) the language in the election requirement and in 37 CFR § 1.146 conditioning restriction of the claims to a single species on the holding of no generic claim to be allowable and (2) the ultimate allowance of a generic claim in the parent application, we conclude that no restriction requirement was in fact made pursuant to 35 U.S.C. § 121 and 37 CFR § 1.146. It thus follows that the instant application, which was filed after the allowance of a generic claim in the parent application, was not a divisional application filed as a result of a restriction requirement and, hence, that 35 U.S.C. § 121 does not prohibit the use of appellant's earlier patent in a double patenting rejection against claim 10 in the instant application.¹ This being appellant's only argument as to error on the part of the examiner in rejecting claim 10 under the judicially created doctrine of double patenting, the examiner's decision to reject claim 10 under the judicially created doctrine of double patenting is affirmed.²

Appellant may file a terminal disclaimer in compliance with 37 CFR § 1.321(c) to obviate all rejections under the judicially created doctrine of double patenting based on U.S. Pat. No. 5,856,631, provided the patent is shown to be commonly owned with this application.

¹ Note situation (C) in MPEP § 804.01.

² There is no indication on the record whether this application was submitted to the Technology Center Director for approval in accordance with MPEP § 804.04. In any event, in light of our determinations *supra*, that section of the MPEP may not be pertinent to this application.

Written Description

The examiner has rejected claims 25, 26 and 31 under the first paragraph of 35 U.S.C. § 112 on the basis that the limitations added to claim 25 in the amendment filed April 3, 2000 (Paper No. 9) “directed to ‘compound having at least about 40% titanium and at least about 50% nickel by weight’ are unsupported by the application as originally filed” (answer, page 6). Appellant explains on page 5 of the brief that claim 25 was narrowed by adding the above-mentioned limitation to define over Hribernik’s sintered material containing 56.28% nickel but only 2.5% titanium. Appellant also states that

[t]he Examiner is correct that Applicant never defined Nitinol in precisely those words, but the definition of Nitinol in the specification substantially supports the definition in claim 25. On page 13, “60 Nitinol” is described as 60% nickel and 40% titanium. On page 18, “56 Nitinol” is described as 56% nickel and 44% titanium. Then later on page 18, “55 Nitinol” is described as a 50/50 atomic percentage with the possibility of some doping compounds added to raise the transition temperature [brief, page 5].

Appellant goes on to state that the addition of the claimed range was intended to limit claim 25 to Nitinol and concedes that a more direct means to the intended end would have been simply to claim it as “Nitinol.”³

The test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to the

³ In fact, appellant attempted to so amend claim 25 in the amendment after final submitted with the brief, which has been refused entry by the examiner, as discussed *supra*.

artisan that the inventor had possession at that time of the later claimed subject matter, rather than the presence or absence of literal support in the specification for the claim language. See Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1116-17 (Fed. Cir. 1991) and In re Kaslow, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983).

We note, at the outset, that appellant's original application discusses the use of 55 Nitinol (a 50/50 atomic percentage intermetallic compound of nickel and titanium with some doping materials added to raise the transition temperature) only for the sleeve 82 (specification, page 18) in the second embodiment, with the liner tube 80 made of 60 Nitinol (specification, page 17) or for the intermediate sleeve 114 of the third embodiment (specification, page 21), with the liner tube 110 made of 60 Nitinol and an outer sleeve 112 made of 56 Nitinol, an alloy "220VC" from Metaltex International Corp. or "Alloy A" from Raychem Corp. In other words, we find no disclosure in appellant's original application for the use of 55 Nitinol for the inner liner or tube and contact surface. Accordingly, appellant's reliance on the disclosure of 55 Nitinol for support for the "tube **and contact surface** being made of a monolithic nickel-titanium intermetallic compound having at least about 40% titanium and at least about 50% nickel by weight" is unwarranted.

The other disclosures in the originally filed application alluded to by appellant establish that appellant contemplated two specific types of Nitinol, namely, 56 Nitinol (56% nickel, 44% titanium) and 60 Nitinol (60% nickel, 40% titanium) for use in forming

the inner, contact surface-presenting portion of the barrel. While both of the disclosed types of Nitinol fall within the claimed range of a “nickel-titanium intermetallic compound having at least about 40% titanium and at least about 50% nickel by weight,” appellant’s application, as originally filed, does not convey to one of ordinary skill in the art that appellant contemplated, at the time the application was filed, the use of Nitinol compounds having less than 56% nickel for the inner contact surface-presenting portion of the barrel. We thus conclude that the disclosures alluded to by appellant in the brief are insufficient to establish that the original disclosure provides written description support for the full range of nickel-titanium intermetallic compounds having at least about 40% titanium and at least about 50% nickel as now recited in claim 25 and claims 26 and 31 which depend from claim 25. Compare In re Wertheim, 541 F.2d 257, 264, 191 USPQ 90, 98 (CCPA 1976) (original application’s disclosure of a range of 25% to 60% and specific examples of 36% and 50% was insufficient to support a later claimed range of “at least 35%” but was sufficient to support a later claimed range of “between 35% and 60%”).⁴

For the foregoing reasons, we agree with the examiner that the invention recited in claims 25, 26 and 31 is not supported by the disclosure of the application as originally filed in compliance with the written description requirement of the first

⁴ The appellant’s proposed amendment (Paper No. 13) to change “nickel-titanium intermetallic compound having at least about 40% titanium and at least about 50% nickel by weight” to “Nitinol” would appear to overcome this rejection.

paragraph of 35 U.S.C. § 112. Accordingly, we affirm the examiner's decision to reject claims 25, 26 and 31 under the first paragraph of 35 U.S.C. § 112.

Anticipation and Obviousness

The examiner has rejected claim 21 under 35 U.S.C. § 102(b) as being anticipated by Hribernik⁵ and claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Hribernik in view of Dabrowski⁶. The sole issue in dispute with regard to each of these rejections is whether the liner of Hribernik's weapon barrel is "a ***monolithic*** nickel-titanium intermetallic compound" as called for in each of claims 10 and 21.

The primary source of the dispute between the examiner and appellant is in the interpretation to be given to the term "monolithic" in claims 10 and 21. In accordance with the dictionary definition of "monolithic" appended to the answer, the examiner determines (answer, page 8) that "monolithic" as used in claims 10 and 21 is so broad that it may be interpreted as "cast as a single piece," "formed or composed of material without joints or seams," or "consisting of or constituting a single unit," in addition to the "undifferentiated throughout, as in cast or forged material" interpretation urged by appellant (brief, page 6).

In proceedings before it, the PTO applies to the verbiage of claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood

⁵ U.S. Pat. No. 4,756,677, issued July 12, 1988 to Hribernik et al.

⁶ U.S. Pat. No. 5,155,291, issued October 13, 1992 to Dabrowski.

by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification. In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997).

We note that the term “monolithic” in appellant’s claims 10 and 21 modifies the claim term “compound,” not the tube or sleeve made from the compound. Thus, in this instance, the definitions “cast as a single piece,” “formed or composed of material without joints or seams” and “consisting of or constituting a single unit” would not seem to be appropriate or reasonable modifiers for a compound. Rather, a definition such as “undifferentiated throughout”⁷ appears more appropriate. Thus, we interpret the term “monolithic” in appellant’s claims 10 and 21 as “undifferentiated throughout.”

Hribernik’s weapon barrel liner is deliberately powder-metallurgically formed (sintered) from different metallic materials to permit the production of a particularly light-weight weapon barrel resistant to the different stresses or loads (high pressure on the one hand and abrasive stresses on the other hand) acting on the liner during the use thereof (column 1, lines 22-38; column 2, lines 1-45). Appellant argues that the sintered material of Hribernik’s liner remains essentially in granular form, fused at its edges, and thus is not “monolithic” or “undifferentiated throughout” as used in claims 10 and 21 (brief, page 6). The examiner has not challenged this statement by appellant,

⁷ One of the dictionary definitions of “monolithic” appended to the answer is “constituting a massive undifferentiated and often rigid whole.”

instead insisting that the definition of “monolithic” is not intended to exclude sintering and does not require that the compound be “undifferentiated throughout” (answer, page 8). The examiner additionally asserts that Hribernik “is not directed only or exclusively to forming by sintering (see entire disclosure)” (answer, page 8). As the examiner has not pointed out where Hribernik discloses formation of the liner in a manner other than sintering (powder-metallurgical forming) and we can find no such disclosure in Hribernik, the examiner has not set forth a reasonable basis to establish that the barrel liner of Hribernik is a “monolithic nickel-titanium intermetallic compound” as called for in claims 10 and 21.

Accordingly, the examiner’s decision to reject claim 21 as being anticipated by Hribernik is reversed. In that the above-noted deficiency of Hribernik finds no cure in Dabrowski, we also reverse the examiner’s decision to reject claim 10 as being unpatentable over Hribernik in view of Dabrowski.

CONCLUSION

To summarize, the decision of the examiner to reject claim 10 under the judicially created doctrine of double patenting and claims 25, 26 and 31 under the first paragraph of 35 U.S.C. § 112 is affirmed and the examiner's decision to reject claim 21 under 35 U.S.C. § 102 and claim 10 under 35 U.S.C. § 103 is reversed. The examiner's decision is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

JOHN P. McQUADE
Administrative Patent Judge

JEFFREY V. NASE
Administrative Patent Judge

JENNIFER D. BAHR
Administrative Patent Judge

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Appeal No. 2001-1553
Application No. 09/224,757

Page 14

J. Michael Neary
542 Southwest 299th Street
Federal Way, WA 98023